

## ABSTRACT OF THE DISCLOSURE

Adaptive deinterlacing of interlaced video to generate a progressive frame on a per pixel basis. Two consecutive fields of interlaced video are converted into a frame of progressive video. One of the fields is replicated to generate half the lines in the progressive frame. Each of the pixels in the other half of the progressive frame are generated pixel-by-pixel. For a given output position of the pixel in the other half of the progressive frame, a correlation is estimated between the corresponding pixel in the non-replicated field and at least one vertically adjacent pixel of the replicated field, and optionally one or more vertically adjacent pixels in the non-replicated fields. In one example, a one pixel wide by five pixel high range of pixels is evaluated centering on the pixel in the non-replicated field that corresponds to the output pixel position. A value is then assigned to the output pixel that corresponds to the output position, the value depending on the correlation. Also, three consecutive input fields of interlaced video may be converted into two output fields of interlaced video on a per pixel basis taking into consideration differences in the consecutive input fields.

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